

ABSTRACT

A method for identifying the primary cell under Site Selective Diversity Transmit comprises the steps of: (1) An ID is assigned by the system to each cell; (2) The ID indicating the primary cell is transmitted periodically by UE to the connected cells via the up link FBI fields; (3) The ID indicating the primary cell transmitted by the mobile station is received by the base station, if the signals received by the base station satisfy with one of the following conditions, then the said base station will consider itself as a primary cell; the identification conditions are: A. The ID code word indicating the primary cell received by the base station is matched with the ID code word of itself; B. The quality of the up link signals received does not satisfy with a quality threshold Q_{th} , at the same time, there is a certain matching degree between the received ID code word indicating the primary cell and the ID code word of the cell itself; and C. The bits of dropping of the ID code word caused by using the up link compression mode excess a limitation. The signals transmitted from some of the non-primary cells having extremely bad quality to UE can be prevented, thereby the system interference is reduced, and the system stability and the system capacity are increased.